

REMARKS

By the above amendment, and in connection with the Request for CPA, claims 15 and 16 of the parent application have been amended to clarify features thereof, claims 1-14 and 17-38 have been canceled, and new claims 39-46 have been presented. Applicants submit that all claims, as presented, should be considered to be in compliance with 35 U.S.C. §112, first paragraph, and patentably distinguish over the cited art utilized in rejecting claims in the manner set forth in the Office Action dated May 16, 2002 in the parent application.

Also submitted herewith is a corrected drawing of Fig. 6 and acceptance of all drawings is requested.

With regard to the rejection of claims 1-9 and 15-16 under 35 U.S.C. §112, first paragraph, applicants note that such rejection is based upon the Examiner's contention that:

It would not have been clear to one of ordinary skill in the art, based on either the disclosure or the claims as originally filed, at the time the present invention was made what "a region having a light transmittance different from that of said light absorbing region" constitutes in both how to make the region and of what material the region is made. There are no examples given as to what the region might be.

Turning to claims 15 and 16 of the original application, applicants note that such claims do not utilize language of "a region having a light transmittance different from that of said light absorbing region", such that the Examiner's rejection of such claims under 35 U.S.C. §112, first paragraph, is not understood. Applicants note that claims 15 and 16 are directed to a method of fabricating an edge emitting/incidence type semiconductor light receiving element formed by sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer. Fig. 1 illustrates a light absorbing layer 19 as part of the light receiving element and shows laminated layers 17, 18, 19, 20, 21 and 15', for example, as described at page 9 of the specification and at page 10, lines 15 et.

seq., describes that a mask or the like is used at the time of forming at least the light absorbing layer 19 so as to perform crystal growth in a manner in which the space region (the positioning region) 24 from which the undoped light absorbing layer 19 is excluded may be formed. Alternatively, it is described that the respective layers can be removed by etching or the like process after lamination, resulting in formation of a similar structure. Claim 15 recites the feature that a thin film growth at a predetermined region of at least the light absorbing layer is prohibited during steps of laminating the light absorbing layer and subsequent thin film layers and such features are clearly disclosed in the specification of this application. Claim 16 recites the feature of an etching step for eliminating a portion of said light absorbing layer existing at a predetermined region of said light absorbing layer and hereagain, such features are clearly disclosed in the specification, as pointed out above. Thus, claims 15 and 16 should now be considered to be in compliance with 35 U.S.C. §112, first paragraph.

As to the other claims of the parent application, such claims have been canceled without prejudice or disclaimer of the subject matter thereof and by the present amendment, a new independent claim 39 has been presented with dependent claims 40-46 depending therefrom. Claim 39 recites the feature of a light transmitting module as illustrated in FIG. 7, having a V-shaped groove substrate 37, with an optical fiber 38 and a light receiving element 31 disposed thereon, wherein the light receiving element is an edge emitting/incidence type light receiving element and is a semiconductor element as illustrated in FIG. 1, for example, having a layer disposed on the one surface of the substrate, which layer 19, for example, include a light absorbing portion and another portion 24 which is a non-light absorbing portion and which defines a space region 24 of the layer. Applicants note that new independent claim 39 and the dependent claims 40-46 do not utilize language of "a region having a light transmittance different from that of said light absorbing region",

and applicants submit that claim 39 and its dependent claims 40-46 find full support in the sense of 35 U.S.C. §112, first paragraph, in the specification, as originally filed, as pointed out above.

As to the rejection of claims 1-38 under 35 U.S.C. 102(e) as being anticipated by Yamada et al (USPAT 5,621,83, Yamada), this rejection is traversed insofar as it is applicable to the present claims, and reconsideration and withdrawal of the rejection are respectfully requested.

At the outset, as to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

In setting forth the rejection under 35 U.S.C. 102 as based upon Yamada, the Examiner indicates that Yamada discloses in Fig. 10 a semiconductor light-receiving element (38) having a light absorbing layer and being projected onto a plain wherein the element is to be mounted.

Turning to claims 15 and 16, applicants submit that Yamada et al does not disclose in the sense of 35 U.S.C. 102, as recited in claim 15, the sequential laminating on a substrate of a plurality of different thin film layers including a light

absorbing layer, wherein a thin film growth at a predetermined region of at least the light absorbing layer is prohibited during steps of laminating the light absorbing layer and subsequent thin film layers. Applicants submit that no such disclosure is present in Yamada et al. Likewise, with respect to the features of claim 16, which recite sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer, and comprising an etching step for eliminating a portion of the light absorbing layer existing at a predetermined region of the light absorbing layer, applicants submit that such features as recited in claim 16 are also not disclosed by Yamada et al in the sense of 35 U.S.C. 102. Accordingly, claims 15 and 16 patentably distinguish over Yamada et al in the sense of 35 U.S.C. 102 and should be considered allowable thereover.

With respect to claim 39 and its dependent claims, applicants note that claim 39 recites the feature of a light transmitting module and assuming arguendo that Yamada et al discloses a substrate, an optical fiber and a light receiving element having a layer disposed on one surface of the substrate, applicants submit that Yamada et al does not disclose in the sense of 35 U.S.C. 102 the feature that the layer of the edge emitting/incidence type light receiving element includes a light absorbing portion and another portion of the layer which is a non-light absorbing portion and which defines a space region of the layer. Accordingly, applicants submit that new independent claim 39 and therewith its dependent claims patentably distinguish over Yamada et al in the sense of 35 U.S.C. 102 and should be considered allowable thereover.

Applicants note that Yamada et al shows in Fig. 10 the making of a positional alignment in a vertical direction, while Fig. 72 thereof shows mounting of a light element on a silica glass carrier which is a separate component from the substrate by using a marker. Applicants note that the portion of the specification of Yamada et al relating to Fig. 72 is completely silent concerning the light element and there is no

disclosure in Yamada et al of the recited features of the light receiving element as recited in independent claims 15, 16 and 39 of this application. Accordingly, applicants submit that all claims present in this application patentably distinguish over Yamada et al and should be considered allowable at this time.

With respect to newly added claims 40-46 which depend directly or indirectly from claim 39, applicants note that such claims recite further features of the present invention which are not disclosed by Yamada et al. Accordingly, applicants submit that these dependent claims should also be considered allowable over Yamada et al in the sense of 35 U.S.C. 102.

The Examiner is invited to contact the undersigned attorney to schedule an interview to resolve any outstanding issues in this application.

In view of the above amendments and remarks, applicants request favorable action in this application.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.38228CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,



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500.38228CX1
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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please cancel claims 1-14 without prejudice or disclaimer of the subject matter thereof.

Please amend claims 15 and 16 as follows:

15. (amended) A method of fabricating an edge emitting/incidence type semiconductor light receiving element formed by sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer, wherein a thin film growth at a predetermined region of at least said light absorbing layer is prohibited during steps of laminating said light absorbing layer and subsequent thin film layers so that said semiconductor light receiving element may be adapted to be positioned in place.

16. (amended) A method of fabricating an edge emitting/incidence type semiconductor light receiving element formed by sequentially laminating on a substrate a plurality of different thin film layers including a light absorbing layer, comprising an etching step for eliminating a portion of said light absorbing layer existing under at a predetermined region of said light absorbing layer so that said semiconductor light receiving element may be adapted to be positioned in place.

Please cancel claims 17-38 without prejudice or disclaimer of the subject matter thereof, and add the following new claims:

--39. A light transmitting module comprising:

a substrate;

an optical fiber disposed on one surface of said substrate; and

an edge emitting/incidence type light receiving element HAVING a layer disposed on said one surface of said substrate;

wherein said layer of said edge emitting/incidence type light receiving element includes a light absorbing portion and another portion which is a non-light absorbing portion and which defines a space region of said layer.

40. A light transmitting module according to claim 39, wherein said light absorbing portion of said layer at least partially surrounds said another portion of said layer which is said non-light absorbing portion and which defines said space region of said layer.

41. A light transmitting module according to claim 39, wherein said edge emitting/incidence type light receiving element is positioned on said one surface of said substrate by projecting a light having a wavelength which is absorbed by said light absorbing portion of said layer and which is enabled to pass said another portion of said layer which is said non-light absorbing portion which defines said space region is enabled to pass.

42. A light transmitting module according to claim 39, wherein said edge emitting/incidence type light receiving element is a semiconductor light receiving element.

43. A light transmitting module according to claim 42, wherein said optical fiber is optically coupled to said semiconductor light receiving element.

44. A light transmitting module according to claim 42, further comprising a semiconductor laser mounted on said substrate, said semiconductor light receiving element being optically coupled to at least one of said semiconductor laser and said optical fiber.

45. A light transmitting module according to claim 43, wherein said semiconductor light receiving element disposed on said substrate is configured by being packaged with either ceramic or resin.

46. A light transmitting module according to claim 44, wherein said semiconductor light receiving element disposed on said substrate is configured by being packaged with either ceramic or resin.--